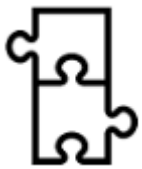
CASE STUDY – Platform Rationalisation **Dr Karl Phillips**

SITUATION

A large platform upgrade programme had been awarded to a major defence contractor. The assumption had been that platforms would be constructed from various architectural building blocks. The reality proved more difficult to implement due to the fact that so many platform designs existed and the variation in platforms was so diverse, each platform design had to be treated as a special case, and required a unique design for build, qualification and safety sign-off. This meant additional unplanned work, that resulted in the programme falling behind schedule and costs were spiralling out of control.

TASK



I was brought in to assist the current Programme Manager who was struggling with the task. I spent a week evaluating the situation and made my recommendations to senior management, which they quickly approved. I assembled a team from scratch, pro-actively engaged the subcontractor and set up weekly targets to monitor progress. Deadline after deadline continued to be missed. Target designs that were built for one platform were not suitable for others due to platform variations, and this resulted in a significant amount of change control management. It became obvious that although progress was being made, it was not fast enough to meet the existing implementation schedule and there were threats of huge penalty clauses on the horizon. Something different had to be done, and the opportunity coincided with an admission from the customer that they had over-estimated the number of platforms that needed to be upgraded.

ACTION

Historically, I had initiated a significant change request that meant an upgrade that my company was contracted to perform on-site with two platform variants was now able to be incorporated into the manufacturers build line, rather than the platforms being shipped down to us, where the new platforms would be taken apart and have to be re-built. This was a major achievement, as it saved the customer both time and money, whilst bringing the platforms into service earlier than expected. With this confidence at the back of my mind, I went up to the System Design Department and asked them to run a query on all the designs and come up with a number of rationalisation options. They delivered their output in an Excel spreadsheet which had a lot of promise, but it needed a lot more analysis before I could mature it enough to show my seniors and the customer. The reduced number of platforms had given me a lot of equipment spares to play with, however I had to make the proposal cost neutral to stand any change of being accepted. I spent a week locked away fine tuning the proposal, uplifting platforms with the spare equipment and reducing the number of designs to a more manageable level. I eliminated designs with less than 10 platform installations, merged very common designs and made sure I didn't eat too far into the spares portfolio. When I was happy with the proposal, I started the negotiation phase initially with senior management and then with the customer community. My ace was that if they didn't take forward the proposal, we as a company would be delivering to them a significant amount of capability in boxes, rather than fitted to platforms. The negotiations took a few weeks, but it was eventually signed off, and I was able to significantly reduce the number of design packs that were needed.

RESULT

With the reduced number of design packs now approved, the programme was able to focus on the 45 designs rather than over 350 designs that were originally contracted [88% reduction in design effort, with an estimated 25% increase in platform capabilities]. The customer community was pleased and so was my company and the subcontractors. The knock on effect also meant a decrease in through-life support costs, reduced integrated logistic support complexities and a rationalised set of ancillaries (brackets, cables). I remember received an innovation award for my efforts, which went down well.

Even though the original sets of requirements was valid, they were fundamentally flawed in terms of quantities and in terms of their long term implementation. The customer community had gone out to their user communities and asked them want they wanted, rather than provide them with a number of prescribed variants to choose from. What came back from the user community was a huge list of very similar, but slightly different needs and wants. The customer community just packaged them up and sent the list out to contract. What this case study has taught me is that there are many ways to reach a destination, and what seems like the most logic and pragmatic at first, may not be the most optimised or efficient in the long run. Question everything, challenge assumptions and think of alternatives, because the process of undertaking deep thinking type work (i.e. rare, high value, non-replicable, not easy to copy or outsource) can yield quite extra-ordinary results.

Looking back nearly 20 years with the power of hindsight, I did an internet survey of which platforms that I worked on are still in service. Six of the variants (mainly those originally built in the 1960's) have been withdrawn, however over 1,200 military platforms are still in-service (yes, some have been further upgraded to extend their service life) and rolling around today. I can say that I had a direct influence on the majority of those fighting military platforms, and the user community now has access to capabilities their customers didn't originally plan for. I hope that I may have made their working lives easier through rationalising the platform portfolio, whilst saving them money as well.

That experience has shown me that we are emotional creatures first, and rational creatures second. Challenging high-pressure and high stress environments come with the territory. To be truly rational we need our emotional needs to be met in terms of self-comfort, self-expression, self-care and meaningful relationships, before we can move into the rational arena. When you are being rational you have the ability to show appreciate to others, listen to discover what you and they don't know, see other people's needs clearly, and be assertive and balanced, without the need to show aggressive or passive traits. All the time, remembering that we don't know everything, we all have blind spots and it is through collaboration and learning with other that we can support each other and achieve great things. These are the lessons I have taken forward into both my personal and working life.